

REMARKS

The Applicant respectfully requests further examination and reconsideration in view of the amendments above and the arguments set forth fully below. Claims 1, 2, 4-13, 15-24, 26-36 and 38-45 were previously pending in this application. Within the Office Action, Claims 1, 2, 4-13, 15-24, 26-36 and 38-45 have been rejected. By the above amendment, Claims 1, 12, 23, 35 and 45 have been amended. Accordingly, Claims 1, 2, 4-13, 15-24, 26-36 and 38-45 are currently pending in this application.

Rejections under 35 U.S.C. § 103

Within the Office Action, Claims 1, 2, 4-13, 15-24, 26-36 and 38-44 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,253,188 issued to Witek et al. (hereinafter “Witek”) in view of U.S. Patent No. 6,133,938 issued to James (hereinafter “James”) further in view of U.S. Patent No. 6,292,894 issued to Chipman et al. (hereinafter “Chipman”).

Witek teaches a system and method for providing classified ads over the Internet. Internet users can connect to a newspaper web server and central web application server to search for and obtain classified ads. Ad records are stored in ad database servers 20 for providing classified ad records on request to application servers 16. To search the ad records, the search process is divided into two principle parts. The first part includes a system entry and pre-selection sequence, and the second part includes a record selection sequence. [Witek, col. 12, lines 10-13] More specifically, in the first part the user enters the system and specifies the category of classified ads to be searched. Thereafter, as the user navigates to the respective selected category, the user further specifies a subcategory for the particular category selected. [Witek, col. 12, lines 27-37] The selected category and subcategory pair is identified by a category/subcategory ID 46. The specific parameters are entered as primary selection parameters 60 and as secondary selection parameters 62. The first part of the search process is limited to performing searches based on category, or in other words a hierarchical search. [Witek, col. 13, lines 30-46] During this first *utilization* of the search system of Witek, the user is *only* able to specify a category and subcategory pair. The second part of the search process is limited to performing searches based on entered parameters, in other words keyword search or parametric search. During this second *utilization* of the search system of Witek, the user is *only* able to perform searches based on entered parameters.

As discussed above, Witek teaches that the user first navigates through the system and specifies a category and subcategory to narrow down the number of records to search. [Witek, col. 12, lines 27-37] According to the teachings of Witek, during this first part of the search process, only the category and subcategory search methodologies are available. Witek then teaches that the second part of the search process includes entering a formal record selection query containing the specific parameters for the ad records the user wishes to see. [Witek, col. 17, lines 42-50] No other search methodologies are available during the second part of the search process. Witek does not teach that during the first part or the second part of the search process, each of the search methodologies are available. Accordingly, Witek does not teach that each utilization of the search module includes the availability of all types of available searches.

Witek does not teach a dichotomous key search. Further, Witek does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search. Specifically, Witek does not teach that any of a keyword search, hierarchical search, dichotomous key search and parametric search can be used at any location within the database. As discussed above, Witek teaches that during the first part of the search process only the category and subcategory are specified and during the second part of the search process only searches based on entered parameters are available.

James teaches a descriptor mechanism for assuring indivisible execution of AV/C operations. James does not teach a dichotomous key search. Further, James does not teach performing a search in which for any given searching step, at any location within the database, three or more different search methodologies are available to be used to perform the search. Specifically, James does not teach that any of a keyword search, hierarchical search, and dichotomous key search can be used when accessing each of the nodes within the directory tree structure.

Chipman teaches a system, method, and medium for retrieving, organizing, and utilizing networked data. Chipman does not teach a dichotomous key search. Further, Chipman does not teach performing a search in which for any given searching step, at any location within the database, three or more different search methodologies are available to be used to perform the search. Specifically, Chipman does not teach that any of a keyword search, hierarchical search, and dichotomous key search can be used when accessing each of the nodes within the directory tree structure.

Accordingly, neither Witek, James, Chipman nor their combination teaches a dichotomous key search. Further, neither Witek, James, Chipman nor their combination teaches performing a search in which for any given searching step, at any location within the database, three or more different search methodologies are available to be used to perform the search. Specifically, neither Witek, James, Chipman nor their combination teaches that any of a keyword search, hierarchical search, and dichotomous key search can be used when accessing each of the nodes within the directory tree structure.

In contrast to the teachings of Witek, James and Chipman, the method of and apparatus for performing a research task of the present invention, interchangeably utilizes a multitude of search methodologies. Specifically, utilizing a search module, a user is able to selectively utilize one or more search methodologies including keyword search, hierarchical search, dichotomous key search and parametric search to correlate a search criteria to a searchable database for generating one or more matching items. It is further taught within the present specification that

[a]t each node within the tree, the user is presented with the option of using any one or combinations of the four search methodologies utilized by the research system. The four search methodologies are keyword search, hierarchical tree search, dichotomous key search, and parametric search. Regardless as to which search methodology or search methodologies are used to reach a particular node, the user can utilize any of the four search methodologies to further refine the search and move further down the directory tree structure. The user may also navigate back up the directory tree structure to a higher node, and once again have the option to use any of the four search methodologies to refine the search from the current node and move further down the directory tree structure.
[Present Specification, page 40, line 27 - page 41, line 9].

Therefore, a user is able to navigate the directory tree structure, utilizing any one of the four search methodologies in any combination to reach the desired result. As discussed above, neither Witek, James, Chipman nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search and the dichotomous key search.

Within the Response to Arguments section of the Office Action, it is stated that

Applicant does not clearly claim that “at any step location within the database, three or more different methodologies are available to be used to perform the search.” Instead, Applicant only claims that “utilizing a selective one or more search methodologies . . . wherein each utilization includes availability of each search.” Therefore, if the Witek discloses one of the methods and the method is

available for the search process, then the Witek still can apply to the invention.
[Office Action, page 7]

The Applicant respectfully disagrees. It is specified within the claims that the search module includes a keyword search, a hierarchical search and a dichotomous key search. This limitation requires that ***all three*** of the search capabilities are present within the search module. In order to properly be applied to the claimed invention, the cited reference(s) must teach or make obvious ***all three*** of the search capabilities. It is further specified within the claims that each utilization of the search module includes the availability of the keyword search, the hierarchical search and the dichotomous key search. Utilization is defined as “to put to use for a certain purpose.” [The American Heritage Dictionary] Just as taught within the specification, the limitation that each utilization of the search module includes the availability of the keyword search, the hierarchical search and the dichotomous key search, specifies that *every time* the search module is used, each of the three search capabilities (keyword search, hierarchical search and dichotomous key search) are available. Neither Witek, James, Chipman nor their combination teach such a search module. As discussed above, neither Witek, James, Chipman nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search and the dichotomous key search.

The independent Claim 1 is directed to a method of accessing information within a directory tree structure. The method of Claim 1 comprises the steps of formatting a searchable database into the directory tree structure, wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes, further wherein each specific node provides a corresponding set of parameters by which each related item of data corresponding to the specific node is defined by setting each parameter with a corresponding value associated with the data item, thereby forming a set parameter, accessing a particular node within the directory tree structure utilizing a search module including keyword search, hierarchical search, and dichotomous key search, wherein when accessing each of the nodes within the directory tree structure utilizing the search module, each of the search methodologies including keyword search, hierarchical search, and dichotomous key search, are available, setting one or more search parameters corresponding to the set of parameters of the particular node, and performing a parametric search from any node within the directory tree

structure using the one or more set search parameters corresponding to the particular node to match the one or more search parameters to the set parameters for each item of data corresponding to the particular node, thereby generating one or more matching discrete data items. As discussed above, neither Witek, James, Chipman nor their combination teach a dichotomous key search. As further discussed above, neither Witek, James, Chipman nor their combination teaches that each utilization of a search module includes availability of any of a keyword search, hierarchical search, and dichotomous key search when accessing each of the nodes within the directory tree structure. For at least these reasons, the independent Claim 1 is allowable over the teachings of Witek, James, Chipman and their combination.

Claims 2 and 4-11 all depend on the independent Claim 1. As described above, the independent Claim 1 is allowable over the teachings of Witek, James, Chipman and their combination. Accordingly, Claims 2 and 4-11 are all also allowable as being dependent on an allowable base claim.

The independent Claim 12 is directed to a research system for accessing information within a directory tree structure. The research system of Claim 12 comprises means for formatting a searchable database into the directory tree structure, wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes, further wherein each specific node provides a corresponding set of parameters by which each related item of data corresponding to the specific node is defined by setting each parameter with a corresponding value associated with the data item, thereby forming a set parameter, means for accessing a particular node within the directory tree structure utilizing a search module including keyword search, hierarchical search, and dichotomous key search, wherein when accessing each of the nodes within the directory tree structure utilizing the search module, each of the search methodologies including keyword search, hierarchical search, and dichotomous key search, are available, means for setting one or more search parameters corresponding to the set of parameters of the particular node, and means for performing a parametric search from any node within the directory tree structure using the one or more set search parameters corresponding to the particular node to match the one or more search parameters to the set parameters for each item of data corresponding to the particular node, thereby generating one or more matching discrete data items. As discussed above, neither Witek, James, Chipman nor their combination teach a dichotomous key search. As further discussed above, neither Witek, James, Chipman nor their combination teaches that each utilization of a search module includes availability of any of a keyword search, hierarchical search, and

dichotomous key search when accessing each of the nodes within the directory tree structure. For at least these reasons, the independent Claim 12 is allowable over the teachings of Witek, James, Chipman and their combination.

Claims 13 and 15-22 all depend on the independent Claim 12. As described above, the independent Claim 12 is allowable over the teachings of Witek, James, Chipman and their combination. Accordingly, Claims 13 and 15-22 are all also allowable as being dependent on an allowable base claim.

The independent Claim 23 is directed to a research system for accessing information within a directory tree structure. The research system of Claim 23 comprises a research server configured to format a searchable database into the directory tree structure, wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes, further wherein each specific node provides a corresponding set of parameters by which each related item of data corresponding to the specific node is defined by setting each parameter with a corresponding value associated with the data item, thereby forming a set parameter, to access a particular node within the directory tree structure utilizing a search module including keyword search, hierarchical search, and dichotomous key search, wherein when accessing each of the nodes within the directory tree structure utilizing the search module, each of the search methodologies including keyword search, hierarchical search, and dichotomous key search, are available, to set one or more search parameters corresponding to the set of parameters of the particular node, and to perform a parametric search from any node within the directory tree structure using the one or more set search parameters corresponding to the particular node to match the one or more search parameters to the set parameters for each item of data corresponding to the particular node, thereby generating one or more matching discrete data items. As discussed above, neither Witek, James, Chipman nor their combination teach a dichotomous key search. As further discussed above, neither Witek, James, Chipman nor their combination teaches that each utilization of a search module includes availability of any of a keyword search, hierarchical search, and dichotomous key search when accessing each of the nodes within the directory tree structure. For at least these reasons, the independent Claim 23 is allowable over the teachings of Witek, James, Chipman and their combination.

Claims 24 and 26-34 all depend on the independent Claim 23. As described above, the independent Claim 23 is allowable over the teachings of Witek, James, Chipman and their combination. Accordingly, Claims 24 and 26-34 are all also allowable as being dependent on an allowable base claim.

The independent Claim 35 is directed to a network of devices for accessing information within a directory tree structure. The network of devices of Claim 35 comprises one or more computer systems configured to establish a connection with other systems, and a research server coupled to the one or more computer systems to format a searchable database into the directory tree structure, wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes, further wherein each specific node provides a corresponding set of parameters by which each related item of data corresponding to the specific node is defined by setting each parameter with a corresponding value associated with the data item, thereby forming a set parameter, to access a particular node within the directory tree structure utilizing a search module including keyword search, hierarchical search, and dichotomous key search, wherein when accessing each of the nodes within the directory tree structure utilizing the search module, each of the search methodologies including keyword search, hierarchical search, and dichotomous key search, are available, to set one or more search parameters corresponding to the set of parameters of the particular node, and to perform a parametric search from any node within the directory tree structure using the one or more set search parameters corresponding to the particular node to match the one or more search parameters to the set parameters for each item of data corresponding to the particular node, thereby generating one or more matching discrete data items. As discussed above, neither Witek, James, Chipman nor their combination teach a dichotomous key search. As further discussed above, neither Witek, James, Chipman nor their combination teaches that each utilization of a search module includes availability of any of a keyword search, hierarchical search, and dichotomous key search when accessing each of the nodes within the directory tree structure. For at least these reasons, the independent Claim 35 is allowable over the teachings of Witek, James, Chipman and their combination.

Claims 36 and 38-44 all depend on the independent Claim 35. As described above, the independent Claim 35 is allowable over the teachings of Witek, James, Chipman and their combination. Accordingly, Claims 36 and 38-44 are all also allowable as being dependent on an allowable base claim.

Within the Office Action, Claim 45 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Witek in view of U.S. Patent No. 5,604,772 issued to Botto et al. (hereinafter "Botto"). The applicants respectfully disagree.

As discussed above, Witek teaches a system and method for providing classified ads over the Internet. Internet users can connect to a newspaper web server and central web application

server to search for and obtain classified ads. Ad records are stored in ad database servers 20 for providing classified ad records on request to application servers 16. To search the ad records, the search process is divided into two principle parts. The first part includes a system entry and pre-selection sequence, and the second part includes a record selection sequence. [Witek, col. 12, lines 10-13] More specifically, in the first part the user enters the system and specifies the category of classified ads to be searched. Thereafter, as the user navigates to the respective selected category, the user further specifies a subcategory for the particular category selected. [Witek, col. 12, lines 27-37] The selected category and subcategory pair is identified by a category/subcategory ID 46. The specific parameters are entered as primary selection parameters 60 and as secondary selection parameters 62. The first part of the search process is limited to performing searches based on category, or in other words a hierarchical search. [Witek, col. 13, lines 30-46] During this first *utilization* of the search system of Witek, the user is *only* able to specify a category and subcategory pair. The second part of the search process is limited to performing searches based on entered parameters, in other words keyword search or parametric search. During this second *utilization* of the search system of Witek, the user is *only* able to perform searches based on entered parameters.

As discussed above, Witek teaches that the user first navigates through the system and specifies a category and subcategory to narrow down the number of records to search. [Witek, col. 12, lines 27-37] According to the teachings of Witek, during this first part of the search process, only the category and subcategory search methodologies are available. Witek then teaches that the second part of the search process includes entering a formal record selection query containing the specific parameters for the ad records the user wishes to see. [Witek, col. 17, lines 42-50] No other search methodologies are available during the second part of the search process. Witek does not teach that during the first part or the second part of the search process, each of the search methodologies are available. Accordingly, Witek does not teach that each utilization of the search module includes the availability of all types of available searches.

As recognized within the Office Action, Witek does not teach a dichotomous key search. Witek does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search. Specifically, Witek does not teach that any of a keyword search, hierarchical search, dichotomous key search and parametric search can be used at any location within the database. As discussed above, Witek teaches that during the first part of the search process only the

category and subcategory are specified and during the second part of the search process only searches based on entered parameters are available.

Botto teaches a transmission system and modem utilizing coded modulation. Botto appears to be cited because of its teaching of a zone searching module which determines a searched zone by dichotomy. Botto also does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search. There is no motivation to warrant the combination of Witek and Botto. There is no hint, teaching or suggestion in either of Witek or Botto to warrant their combination.

This is a classic case of impermissibly using hindsight to make a rejection based on obviousness. The Court of Appeals for the Federal Circuit has stated that “it is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.” In Re Fritch, 972 F.2d, 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). As discussed above, Witek and Botto do not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search, as claimed. As recognized within the Office Action, Witek does not teach a dichotomous key search. Botto does teach a zone searching module which determines a searched zone by dichotomy. Within the Office Action, it is stated that

[i]t would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Botto into the invention of Witek because the combination would reduce the memory access when using binary search, and providing user more search methodologies. [Office Action, page 6]

It is only with the benefit of the present claims, as a “template” that there is any motivation to combine the data modem of Botto with the classified ad system of Witek. No such motivation can be found in the teachings of either of the references. To conclude that the combination of Witek and Botto is obvious, based on the teachings of these references, is to use hindsight based on the teachings of the present invention and to read much more into Witek and Botto than their actual teachings. This is simply not permissible based on the directive from the Court of Appeals for the Federal Circuit.

It is well settled that to establish a *prima facie* case of obviousness, three basic criteria must be met:

- 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- 2) there must be a reasonable expectation of success; and
- 3) the prior art reference, or references, must teach or suggest all the claim limitations. MPEP § 2143.

The burden of establishing a *prima facie* case of obviousness based on the teachings of Witek and Botto has not been met within the Office Action.

There is no motivation to combine the teachings of Botto with Witek. Botto relates to a transmission system and modem utilizing coded modulation. Botto teaches that the zone searching module determines the zone of the reference quadrant by dichotomy according to an algorithm. [Botto, col. 5, lines 26-29] Botto is only cited because it teaches searching by dichotomy. There is no hint, teaching or suggestion in either Botto or Witek to motivate one skilled in the art to combine their teachings. It is only with the benefit of the presently claimed invention as a “template” that one would consider combining the dichotomous search of Botto with the classified ad system of Witek.

Even if considered proper, the combination of Witek and Botto does not teach performing a search in which for any given searching step, at any location within the database, four different search methodologies are available to be used to perform the search. Neither, Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search.

In contrast to the teachings of Witek and Botto, the method of and apparatus for performing a research task of the present invention, interchangeably utilizes a multitude of search methodologies. Specifically, utilizing a search module, a user is able to selectively utilize one or more search methodologies including keyword search, hierarchical search, dichotomous key search and parametric search to correlate a search criteria to a searchable database for generating one or more matching items. As further discussed above, it is taught within the present specification that

[a]t each node within the tree, the user is presented with the option of using any one or combinations of the four search methodologies utilized by the research system. The four search methodologies are keyword search, hierarchical tree

search, dichotomous key search, and parametric search. Regardless as to which search methodology or search methodologies are used to reach a particular node, the user can utilize any of the four search methodologies to further refine the search and move further down the directory tree structure. The user may also navigate back up the directory tree structure to a higher node, and once again have the option to use any of the four search methodologies to refine the search from the current node and move further down the directory tree structure. [Present Specification, page 40, line 27 - page 41, line 9].

Therefore, a user is able to navigate the directory tree structure, utilizing any one of the four search methodologies in any combination to reach the desired result. As discussed above, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search.

It is specified within the claims that the search module includes a keyword search, a hierarchical search, a dichotomous key search and a parametric search. This limitation requires that *all four* of the search capabilities are present within the search module. In order to properly be applied to the claimed invention, the cited reference(s) must teach or make obvious *all four* of the search capabilities. It is further specified within the claims that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search. Utilization is defined as “to put to use for a certain purpose.” [The American Heritage Dictionary] Just as taught within the specification, the limitation that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search, specifies that *every time* the search module is used, each of the four search capabilities (keyword search, hierarchical search, dichotomous key search and parametric search) are available. Neither Witek, Botto nor their combination teach such a search module. As discussed above, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search and the parametric search.

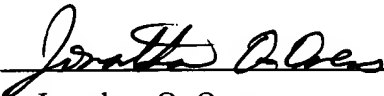
The independent Claim 45 is directed to a method of accessing information within a directory tree structure. The method of Claim 45 comprises the steps of formatting a searchable database into the directory tree structure, wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes, further wherein each specific node provides a corresponding set of parameters by which each related item of data corresponding to the specific node is defined by setting each parameter with a

corresponding value associated with the data item, thereby forming a set parameter, accessing a particular node within the directory tree structure utilizing a search module, the search module includes a keyword search, a hierarchical search, a dichotomous key search, and a parametric search, wherein each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search, setting one or more search parameters corresponding to the set of parameters of the particular node, and performing a parametric search from any node within the directory tree structure using the one or more set search parameters corresponding to the particular node to match the one or more search parameters to the set parameters for each item of data corresponding to the particular node, thereby generating one or more matching discrete data items. As described above, the combination of Witek and Botto is not proper. As further discussed above, even if considered proper, neither Witek, Botto nor their combination teach that each utilization of the search module includes the availability of the keyword search, the hierarchical search, the dichotomous key search, and the parametric search. For at least these reasons, the independent Claim 45 is allowable over the teachings of Witek, Botto and their combination.

For the reasons given above, Applicant respectfully submits that the pending claims are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, she is encouraged to call the undersigned attorney at (408) 530-9700.

Respectfully submitted,
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Date: June 13, 2005

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CERTIFICATE OF MAILING (37 CFR § 1.8(a))

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HAVERSTOCK & OWENS LLP

Date: 6-13-05 By: 